

a front surface/back surface position detector for continuously detecting a position on said conveyor of both a front surface and a back surface of an article that is moved by said conveyor; and

an image data input focus point control section for outputting data from said front surface/back surface position detector to said image data input focus point modifier, said image data input focus point modifier continuously adjusting the focus point based on said data from said front surface/back surface position detector.

7. (New) A method of reading an optical symbol, comprising the steps of: conveying an article including a first optical symbol on a front surface and a second optical signal on a back surface;

reading said first optical signal while conveying said article; and

reading said second optical signal while conveying said article,

wherein the step of reading said first optical signal comprises the steps of:

detecting said front surface of said article;

calculating a distance from an optical symbol reader to said front surface;

continuously adjusting the focus of said optical symbol reader based on said calculated distance to said front surface; and

sensing said first optical symbol with said optical symbol reader, and

wherein the step of reading said second optical signal comprises the steps of:

detecting said back surface of said article;

calculating a distance from said optical symbol reader to said back surface;

continuously adjusting the focus of said optical symbol reader based on said calculated distance to said back surface; and

sensing said second optical symbol with said optical symbol reader.

8. (New) The method of claim 7, wherein the steps of detecting said front and back surfaces comprises the steps of:

sensing a plurality of optical axis, each of said optical axis corresponding to a different position along a conveyor; and

determining which of said plurality of optical axis are shielded by said article.

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9. (New) The method of claim 7, wherein the step of detecting said front surface detects the leading edge of said surface.

10. (New) The method of claim 7, wherein the step of detecting said back surface detects the trailing edge of said surface.

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